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**BASIC**

# Reporting on Nuclear Disarmament

Success and failure in 25 years of disarmament diplomacy

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## BASIC

The British American Security Information Council (BASIC) is an independent think tank and registered charity based in Central London, promoting innovative ideas and international dialogue on nuclear disarmament, arms control, and nonproliferation. Since 1987, we've been at the forefront of global efforts to build trust and cooperation on some of the world's most progressive global peace and security initiatives, advising governments in the United States, United Kingdom, Europe, the Middle East and Russia. Through an approach based on active listening, understanding and empathy, the charity builds bridges across divides and lay new pathways to inclusive security.

BASIC has developed institutional expertise across a number of transatlantic issue areas, including the UK-US nuclear relationship, the UK's Trident programme, the politics of disarmament and arms control in the UK Parliament, NATO nuclear weapons in Europe, the Middle East, the evolving role of responsibility in nuclear governance, and expanding technological threats to SSBN platforms.

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# Glossary

CTBT	Comprehensive Nuclear-Test-Ban Treaty
FMCT	Fissile Materials Cut-Off Treaty
GGE	Group of Governmental Experts
HINW	Humanitarian Impact of Nuclear Weapons
IAEA	International Atomic Energy Agency
ICAN	Intl Campaign to Abolish Nuclear Weapons
ICJ	International Court of Justice
JCPOA	Joint Comprehensive Plan of Action
NATO	North Atlantic Treaty Organisation
NNWS	Non-Nuclear Weapon States
NPDI	Non-Proliferation and Disarmament Initiative
NWFZ	Nuclear Weapon Free Zone
NWS	Nuclear Weapon States
OEWG	Open-Ended Working Group
PrepCom	Preparatory Committee
RevCon	Review Conference
TPNW	Treaty on the Prohibition of Nuclear Weapons
UNGA	United Nations General Assembly
WMDFZME	Weapons of Mass Destruction Free Zone in the Middle East



# Introduction

Nuclear disarmament has fallen off the public agenda. Media attention is sporadic and reactive, focusing on short-term trends like summits with North Korea or sanctions on Iran. But the longer-term process of global disarmament rarely features in the news cycle and where there is reference it is treated with disdain as unrealistic. This has serious costs to public engagement and democratic accountability.

This report offers a short accessible history of the nuclear disarmament regime over the last quarter century to help contextualise the events of the present day. Drawing on the expertise of 25 disarmament experts and officials, it reviews the key successes and failures in the regime in this period, offers some recommendations and lessons learned, and proposes a narrative framing to talk about these events as a whole.

In an expert community dominated by competing opinions and sometimes intimidating detail, the purpose is to provide a clear and balanced overview of the disarmament regime for media professionals who are new to the field, to facilitate reporting with a long-term view and reinvigorate public interest in disarmament.

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*'Climate change and nuclear war both pose existential threats to humankind. If you care about one, you should care about the other.'*

– Alexandra Bell, Senior Policy Director, Center for Arms Control and Non-Proliferation

# What is nuclear disarmament?

*'Nuclear Disarmament: The process leading to the realization of the ultimate goal of a world without nuclear weapons and any measure contributing hereto. Nuclear disarmament may also refer to the end state after nuclear weapons are eliminated.'*

*–P5 Glossary on Key Nuclear Terms published by the five Nuclear Weapon States under the Non-Proliferation Treaty (China, France, Russia, United Kingdom and the United States)*

Nuclear disarmament, as described in this report, follows the first of these two definitions. It is a holistic process describing the complete, irreversible and verifiable deconstruction of fission and fusion weapons, and the broader transition to alternative sustainable peace and security doctrines in which nuclear deterrence no longer plays a role. Although often used synonymously with reductions in stockpile numbers – naturally, an important indicator – a fully-functional nuclear disarmament process needs also to address the root causes and incentive structures that lead states to possess nuclear weapons in the first place. In other words, nuclear disarmament needs to address both the *what* and the *why*.

In practice, nuclear disarmament is therefore bound up with efforts to improve the global security environment and restrain the nuclear arms race too. Related measures such as nuclear arms control (the management of nuclear relations and stockpile numbers); non-proliferation (stopping the spread of nuclear weapons); risk reduction (minimising the likelihood of nuclear use); trust and confidence-building; norm-building; and verification (demonstrating that weapons are irreversibly dismantled) all affect the conditions for success in disarmament talks. Nuclear disarmament is also influenced by perceptions connected to global conventional forces and the functionality of linked regimes, such as those prohibiting chemical and biological weapons or missiles. Reductions do not generally occur in a vacuum, but are more likely to attract support if they form part of a comprehensive and coordinated global strategy to transform security relations. Removing a functional weapon type from the complex international security ecology is akin to removing a single species from the food web and can have system-wide effects.

Beyond the practical security challenges to disarmament is the fact that nuclear weapons are deeply political. Domestically, nuclear weapons are used as a potent political weapon to be used against political opponents to allege that they are 'immoral' or 'weak on defence,' often obfuscating the real issues in exchange for short-term political gain. Internationally, nuclear weapons are still seen by some as a symbol of prestige and power, and by others as a tool of imperialism. The Nuclear Weapon States (NWS) recognised under the Non-Proliferation Treaty (NPT) – China, France, Russia, the United Kingdom, and the United States – are, to greater or lesser extents, all politically attached to their arsenals.<sup>1</sup> So nuclear disarmament as a process is as dependent on changing public and officials' perceptions and attitudes as it is of making technical breakthroughs or diplomatic headway.

For that reason, nuclear disarmament has been characterised as a 'wicked problem.' It is a continuously-evolving process involving thousands of moving parts, and a diverse range of actors, approaches, and interests. It is intimately tied up with raw power and espionage, making it one of the hardest issues to tackle or analyse. And just when things seem to be going well, a change in the strategic or technological environment can throw things off balance. In the end, disarmament will rely on the personalities of those in the room, the alignment of a number of political and technological conditions, and good fortune.

# Is nuclear disarmament still relevant?

*'The risk of nuclear catastrophe is greater today than during the Cold War.'*  
–William J. Perry, Former United States Secretary of Defense

The nuclear threat is returning and the Cold War's legacy has not been resolved. However, nuclear disarmament has fallen off the political agenda and knowledge of the issues has fallen to dangerously low levels even among the educated public. Many experts, like Perry, believe that while the chance of global nuclear war may be lower than during the 20th century, the risk of one or a handful of nuclear weapons being used is even higher and more urgent. Yet despite serious concern in the expert community, the public perceive a low level of risk and are not motivated to take up the issue. There are a number of key reasons that mean that the reduction of nuclear risks and the pursuit of a robust nuclear disarmament agenda should return to the public consciousness.

**1. Major power competition is returning after a period of relative global peace.** Deep divisions are emerging between nuclear-armed states at the international level, and the risk that a cold conflict turns hot in a short space of time is real. A confrontation between the United States and an emerging China in the South China Sea, or between a resurgent Russia and NATO in Eastern Europe, could dramatically spiral out of control in the fog of war. The core driving force is a pivot from multilateral cooperation to nationalism. Security dilemma dynamics are at play: armament by one side drives armament by the other, and a new arms race is emerging, concurrent with a breakdown of the uneasy consensus that stability can be preserved by states having roughly mutual nuclear forces and exercising restraint. Influential voices in Washington D.C. with worrying influence within the Trump Administration have been calling for the United States to exploit emerging technologies to race ahead for nuclear 'superiority' by reducing their vulnerability, and to lower the threshold at which use of nuclear weapons would be considered.

**2. There are more nuclear-armed states today, creating more chances for nuclear use.** The Cold War reflected a bilateral international system, and the risk of nuclear conflict came down primarily to the relationship between the two superpowers. Today there are nine nuclear-armed states, and their relationships are overlapping and complex. The risk of nuclear conflict in South Asia between India and Pakistan is dramatically underreported, not to mention the risk of nuclear use on or by North Korea. Moreover, although the non-proliferation regime is getting stronger, there is a risk that other states will see nuclear weapons as a viable means to ensure their security, and new proliferators will emerge. Conflict involving nuclear weapons between any of them would have global effects, potentially causing mass famines and upending the international rule of law.

**3. Emerging weapons technologies are developing fast.** With the relative success of the chemical and biological weapons regimes, nuclear weapons seemed for a period the only weapon of mass destruction left to address. Today, however, numerous new technologies are coming online, which present challenges both in their own right and in the ways in which they interact with nuclear systems. These include cyber weapons, artificial intelligence, robotics, space-based systems, big data, and advanced conventional weapons. All of these technologies are intersecting and fusing in unpredictable ways, and are becoming easier to develop with each year, but much is happening outside the public gaze. All of this speaks to the need for restraint and a comprehensive dialogue on the role played by weapons in the international community.

# Nuclear disarmament since the Cold War

For most of the 20th century, disarmament was the focus of waves of state and civil society activism.<sup>2</sup> Scientists and officials involved with the Manhattan Project became nuclear weapons' first opponents in the West, founding the *Bulletin of the Atomic Scientists* with its world-famous Doomsday Clock. The late 1950s then saw global opposition to atmospheric nuclear testing, and as the world looked over the brink in the 1980s, Reagan and Gorbachev's declaration in 1986 that a 'nuclear war can never be won and should never be fought' seemed to indicate that the commitment to nuclear weapons by both superpowers was on the wane.

This report takes the end of the Cold War as its starting point, when things seemed to be getting better. In 1995, when the Cold War was over and nuclear arsenals had already dramatically reduced, the Nuclear Non-Proliferation Treaty (NPT) was extended indefinitely, effectively locking nuclear disarmament in forever as a global aspiration. The world seemed to have reached a turning point: the nuclear arms race had finally stopped, and world leaders sensed a window of opportunity to reform the existing global security paradigm from one of competition to one of cooperation. The most important component would be to fundamentally rethink the dependence on nuclear deterrence and find other ways to coexist. Attempting to finish what they had started some decades earlier, states and civil society sought to drive a series of purposeful, legally-binding steps necessary to ensure the permanent and irreversible elimination of nuclear weapons.

Initiatives led by the United States and Russia in the preceding years had set a good pace. The 1991 and 1992 reciprocal Presidential Nuclear Initiatives, and the bilateral arms control agreement START (Strategic Arms Reduction Treaty), withdrew thousands of tactical and strategic weapons from Russian and US arsenals. The Nunn-Lugar Cooperative Threat Reduction Program enacted in 1991 started the long project of securing Soviet weapons of mass destruction sites, materials, and knowledge to prevent proliferation and promote transparency. The Open Skies Treaty, proposed decades earlier but which had never got off the ground, was signed in 1992 by the then-member states of NATO and the Warsaw Pact. Belarus, Kazakhstan, and Ukraine voluntarily gave up their nuclear weapons and joined the NPT to receive multilateral security guarantees, and South Africa unilaterally disarmed too. In 1994, with strong US support, the United Nations Conference on Disarmament (CD) formally began negotiations on the Comprehensive Nuclear Test-Ban Treaty (CTBT) to ban nuclear testing, and was on the cusp of completing them when the NPT Review and Extension Conference opened in May 1995.

States and transnational civil society felt some hope, and the Conference provided the forum to consolidate a common vision. It agreed to strengthen the review process, and the outline of a programme of action for the nuclear disarmament regime. All parties to the treaty now meet in five-year review cycles that not only include the previous Review Conferences (Rev Cons) but also three shorter Preparatory Committees (Prep Com) to agree the Rev Con agenda, each of which is supposed to systematically build on the last. States agreed to work to ban nuclear testing and the production of fissile materials through a Fissile Material (Cut-off) Treaty Or FM(C)T, not to attack Non-Nuclear Weapon States with nuclear weapons ('negative security assurances'), and to institute stronger non-proliferation provisions to curtail the risks that states with advanced nuclear fuel cycles or importing nuclear materials could develop nuclear weapons. States also endorsed the creation of a WMD Free-Zone in the Middle East (WMD FZME), as had already been achieved in Latin America and Africa. And it was there that the decision was taken to keep the NPT in force

indefinitely. There was cautious optimism in the air, and the challenge was just to take the right steps in the right way, in a logical 'step-by-step process.'

Today, the path is very partially trodden. There have been clear successes, but there have also been many failures and missed opportunities along the way, and the international community is ambivalent about the regime as a whole. While successive Rev Cons sought to further clarify responsibilities and actions items, most notably the '13 Practical Steps on Nonproliferation and Disarmament' (2000) and the '64-Point Action Plan' (2010), the nuclear disarmament agenda has radically slowed and the community is waiting for key steps. The effect has been deepening divisions and despondency. The Rev Con in 2015 ended in failure, with states unable to agree even a final document, and the prospects for meaningful steps forwards in 2020 look dim. In hindsight, the brave new world that many in the 1990s hoped for seems disappointingly like a temporary respite from hostilities. Many are seriously questioning whether the approach set out in 1995 will work – or could ever have worked.

The international community is now polarised about what to do next, and the atmosphere is soured by finger-pointing and condescension. The Nuclear Weapon States (NWS) recognised under the NPT attribute the slowdown to a deteriorating global strategic context, and accuse many Non-Nuclear Weapon States (NNWS) of not understanding or caring about their security needs. They will give up their nuclear weapons eventually, they say, but only when this could be done without destabilising their own and global security. The NNWS reiterate that they too are affected by the nuclear shadow, and say the NWS are demonstrating a lack of good faith by refusing to commence long-owed multilateral negotiations for disarmament. At the centre of the dispute is a difference of belief on whether nuclear deterrence contributes to national or global security, or cannot be relied upon and must be abandoned without delay. Each is an article of faith, and the tension seems fundamentally irresolvable.

It is clear that things cannot go on as they have been. The NNWS will only feel more unheard and exasperated if the NWS do not act. The NWS will be the first to suffer from inaction, caught up in grand narratives about great power competition and bearing costly and unnecessary arms races running into trillions of dollars. Trust has been lost on all sides and cannot be rebuilt simply by speaking louder. Now is a good time to reflect with honesty and humility on the disarmament process to date, review the assumptions that underpin it, and learn lessons that can guide new action. It will also mean a far greater public awareness of the issues is needed, to push states along – as for climate change. It's time to do things differently.

Is nuclear disarmament possible? In principle, it should be. Humans built nuclear weapons, and humans can take them apart. Some states have already disarmed. Nuclear weapons cannot be un-invented, but measures can be taken to reliably control the means of their production and responsibly safeguard nuclear knowledge for the long-term. The risks are too high simply not to try.

But what to do?

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*An 'integrative' approach to nuclear disarmament is now needed.*



ICAN Austria (CC BY 2.0)

# Approaches to nuclear disarmament today

The policies, laws, and norms governing nuclear weapons are shaped by an international group of stakeholders that includes state officials, think tank professionals, academics, civil society actors, lawyers, scientists, the private sector, and a variety of other actors. This might be loosely termed the 'international nuclear weapons policy community,' though the title should not betray their diverse values, beliefs, interests, and approaches.

This section outlines the leading conceptual approaches to nuclear disarmament within the international nuclear weapons policy community and their theoretical models of change. Though sometimes considered mutually exclusive by purists, none explains the whole picture or offers a foolproof plan. Rather, each plays its function, and in practice these strategies are often complementary and collectively set the context for international action. When they do occasionally seem unable to co-exist, the disarmament agenda is pulled in multiple directions despite sharing a common goal, causing more harm than good. Understanding these approaches will help situate changes and critiques of the disarmament regime.

## ‘Step-by-step’ approach

The dominant paradigm governing the reduction and disarmament of nuclear weapons is a gradualist, ‘step-by-step’ approach. It reasons that nuclear disarmament will happen in ‘steps’ rather than by an all-encompassing agreement. The underlying assumption is that although security or political conditions may prevent progress on some issues, there will be other issues that states can direct their energies towards until the conditions change. By progressively locking in the steps with legally-binding instruments achieved through a series of concerted pushes, it will all add up to nuclear disarmament in the end.

The step-by-step paradigm grew from the momentum of the post-Cold War period in the 1990s, but the idea that disarmament will happen in phases has a longer history. Early approaches to nuclear disarmament in the 1950s focused on achieving ‘general and complete disarmament’ (GCD): a comprehensive agreement that, in addition to nuclear weapons, would limit conventional and other forms of weapons of mass destruction and facilitate a broader world peace. GCD is an intuitive end goal that is still sometimes incorporated into treaty language, and laudable efforts continue today to reinvigorate that agenda.<sup>3</sup> But with superpower competition and paranoia looming, and particularly following the Cuban Missile Crisis in October 1962, GCD was side-lined in the early-1960s in favour of arms control between the United States and the Soviet Union and ‘partial measures’ of disarmament.<sup>4</sup>

Partial measures were successful on their own terms, achieving the Hotline Agreement (1963), a Partial Test Ban Treaty (1963), the NPT (1968), five nuclear-weapon-free zone treaties (1967-2006), the Biological Weapons Convention (1972), Chemical Weapons Convention (1992), and several other treaties that limited nuclear weapon deployments. They complemented bilateral arms control between the United States and the Soviet Union, which in turn created the stability and trust needed to negotiate legally-binding disarmament measures. Though they lacked the idealism of GCD, partial measures seemed like a workable model for practical progress.

With the NWS legally committed to disarm in Article VI (which also includes reference to GCD) with the entry into force of the NPT in 1970, step-type language was increasingly adopted to hold them to their obligations. Identifying the steps was something practical that the NNWS could do to assist the process, while the NWS would have to carry them out. The first United Nations Special Session on Disarmament (SSOD) in 1978, convened by the General Assembly (UNGA) in response to a slowing down of the disarmament agenda uses step-type language heavily, which is reflected in the second and third sessions.<sup>5</sup> By the mid-1990s, the ‘step-by-step’ phrase became mainstream, with the 1994 General Assembly Resolution on GCD explicitly using the phrase to identify ‘general areas for step-by-step reduction of the nuclear threat.’<sup>6</sup>

A step-by-step approach, then, might be defined as a progression of positive, purposeful, measurable and effective steps taken towards the goal of universal nuclear disarmament. Today, the paradigm is sometimes made a proper noun and given a definite article and capital letters: ‘The Step-by-Step Approach,’ as if it has some kind of existence beyond the steps and measures themselves. But unfortunately, the interviews conducted for this report suggested that what this category encompasses seems unclear even to practitioners. Having no authoritative founding document, the step-by-step approach lacks a single definition, often being used liberally to refer to a basket of measures and regimes. It also raised a number of conceptual questions about how the step-by-step approach is supposed to work. For instance:

- Does a step-by-step approach to nuclear disarmament include measures that contribute to disarmament indirectly, but which do not fundamentally challenge the role of nuclear weapons in the security doctrines, such as non-proliferation or cuts to nuclear forces motivated by budgetary concerns?
- Do steps need to be sequenced, or could they happen in parallel?
- Does a commitment to a step-by-step approach necessarily preclude alternative approaches or can they be complimentary?

The fact that a step-by-step approach means different things to different people may mean that everyone can subscribe to it, but it may also mean that people have different expectations and levels of satisfaction with progress. If the step-by-step approach only encompasses measures taken with multilateral disarmament in mind, then there is some truth to suggestions that the NNWS have been lulled into a false sense of security by the allure of a step-by-step regime that isn't really there, and that the NWS have created the impression of continuity by retrospectively linking together piecemeal measures under the step-by-step banner. If not, then advances in safeguards and export control regimes that prevent proliferation, for example, should be celebrated as disarmament steps. This chimes with the P5 Glossary definition, but not with the intuitive understandings of many NNWS. All of this speaks to a need for the international nuclear weapons policy community to come to greater clarity on what counts as a legitimate step in a step-by-step process, and it may be preferable to return to the more inviting indefinite article: a step-by-step approach.

The biggest problem of a step-by-step approach is that it is currently stymied by opposition in each of its steps from states that see particular steps as counter to their security interests. The majority of the international community appears to be left advocating for the steps, but any concrete negotiations are blocked. The UN Conference on Disarmament has failed to negotiate a single disarmament mechanism associated with nuclear disarmament since the CTBT in 1996.

In response to this, the Government of Sweden is suggesting a 'Stepping Stones' approach, which breaks down the steps into more achievable interim moves: an attempt to implement the steps incrementally. They explain this in terms of finding nudges that can be achieved to move in the right direction without challenging established nuclear doctrines head-on or demanding moves that are seen as undermining security for any of the states currently blocking progress. These stepping stones could then establish greater confidence and trust in the further steps along the way.

### **'Building blocks' approach**

A 'building blocks' approach to nuclear disarmament was proposed in a working paper to the Open-Ended Working Group (OEWG) in 2013 by Japan and others. It sought to clarify that disarmament does not need to take place in sequential steps, as 'step-by-step' seems to imply, and that states could pursue 'parallel and simultaneous steps' or building blocks that both legal and non-legal in nature and pursued at 'multilateral, plurilateral, bilateral or unilateral' levels.<sup>7</sup> The visual image of building blocks instead of steps intended to make disarmament look less like a precarious rope-bridge and more like a jigsaw.

A building blocks approach has received less attention in the 2015-2020 Review Cycle, but has serious potential to be revisited. That the agenda was given its own definite article in 2016 – 'The Progressive Approach' – created some tribalism and the change in language never quite caught on with the NWS.<sup>8</sup> The appearance of the Treaty on the Prohibition of Nuclear Weapons (TPNW) in 2017 caused opponents to close ranks around the mainstream agenda. Some also felt that a change in language would be confusing and that the step-by-step approach could already incorporate parallel steps.

### **'Comprehensive' approach**

A comprehensive approach to nuclear weapons would look to prohibit all nuclear weapons activities and agree all the necessarily steps for total, verifiable and irreversible disarmament simultaneously. In effect, it is the opposite of a step-by-step process. The early example was the model Nuclear Weapons Convention submitted by Costa Rica as a discussion document to the UN General Assembly by a group of states, lawyers and activists in 1997. Lacking the support of the NWS, the convention was not able to replace the step-by-step process and became inactive, although it has remained nominally on the UN's agenda and the idea still lingers in the background.

## **‘Prohibition, stigmatisation, elimination’ approach**

The ‘prohibition, stigmatisation, elimination’ approach, as it is termed here, is the wider strategy associated with the TPNW or nuclear ban treaty. Led by a transnational advocacy group under the banner of the International Campaign to Abolish Nuclear Weapons (ICAN) and a core group of activist NNWS, 122 states voted to adopt the TPNW in 2017 and are now working hard to gather the 50 ratifications needed to bring the instrument into force, which may be as soon as 2020. Their strategy is to gradually attract more states, especially from NATO, and tighten the net on the NWS and their staunchest allies. It has already made headway into Europe with Ireland and Austria leading the approach, and while the step-by-step approach happens primarily at the state level, the TPNW is working at the local level too: for instance, the state of California recently adopted resolution in support.

Campaigners worldwide are using the phrase ‘banning nuclear weapons,’ but there is an important difference from the ‘comprehensive’ approach as previously conceived. In force, the TPNW would ban most activities associated with nuclear weapons and has the potential to act as a kind of framework convention that could be built outwards in coming years, but as an international treaty, it is binding only on states that sign it.<sup>9</sup> The NWS and many NNWS allies have been resolutely opposed to the whole approach, on the basis that it is essentially a public pressure campaign which fails to take account of their legitimate security concerns, and so will not sign it soon (if ever). The TPNW is therefore not a grand agreement to rid the world of nuclear weapons, but rather its own kind of incrementalist approach that can be likened to a global nuclear weapon-free zone (NWFZ) that states can voluntarily join.<sup>10</sup>

For the ‘prohibition, stigmatisation, elimination’ approach, the Treaty itself is primarily a political tool in a broader strategy which seeks to stigmatise the possession of nuclear weapons at both the domestic and international levels by drawing attention to linkages with other issues, primarily the humanitarian consequences of nuclear violence. Advocates cite the role of stigmatisation in the chemical, biological, cluster munition, and landmine conventions, and point to the intuitive need to change existing perceptions of nuclear weapons if they are to be eliminated. There is sense in this, and although it remains unpopular, there may nevertheless be reason to consider stigmatisation an essential ‘step’ or ‘building block’ in the disarmament regime somewhere along the way.

## **Legal approaches**

On several occasions, states have sought to accelerate disarmament by determining the illegality of the use or threat of use of nuclear weapons. The 1996 International Court of Justice (ICJ) Advisory Opinion on the question determined that there was no law that expressly prohibited the possession or use of nuclear weapons, but advised that the threat or use of nuclear weapons would be generally contrary to the rules and principles of international humanitarian law and reaffirmed the responsibility of all states to play a role in disarmament without delay.<sup>11</sup> In 2014, the Marshall Islands brought an ICJ case against the nine nuclear weapon possessor states for alleged failure to negotiate on the cessation of the nuclear arms race and nuclear disarmament under customary international law.<sup>12</sup> It lacked compulsory jurisdiction over six of the states, and the case failed on procedural grounds for the remaining three, who have since made it harder to bring the case again.<sup>13</sup> In the United Kingdom, a retired Trident SSBN commander has been pressing the Government to confirm how he or his counterparts today would know whether the order to fire would be legal under international humanitarian law.<sup>14</sup> To date, international legal approaches have tended to be relatively unsuccessful, but international law can shift according to normative pressures and it may well increase in salience in coming decades.

## **‘Creating the Environment for Nuclear Disarmament’**

Creating the Environment for Nuclear Disarmament (CEND) is a new agenda of the United States under the Trump Administration. It contends that nuclear disarmament will be the result of a more peaceful and

secure strategic context, rather than the cause of it; as its chief architect Assistant Secretary of State for International Security and Non-Proliferation Chris Ford outlined last year:

*... reasoning that the perceived need for nuclear weapons possession is more a result than a cause of challenging strategic situations, it seems to us that any workable approach today is necessarily likely to focus more heavily upon addressing trends and circumstances of threats and competition in global affairs than upon the numbers of weapon in itself.<sup>15</sup>*

Inviting all states to take part in a pluralistic multi-year initiative to identify and work towards this environment, CEND asks what would need to be in place to make disarmament strategically and politically feasible. There might be much to be gained by the international nuclear weapons policy community engaging with it in good faith. There is at this stage some scepticism of its motives, not aided by the fact that in its first iteration it was called 'Creating the Conditions for Nuclear Disarmament,' which many saw as 'preconditions,' although this has since been explicitly ruled-out by the State Department officials. It remains to be seen how the approach progresses.

## **Competition and complementarity in these approaches**

Each of these conceptual pathways to nuclear disarmament is founded on its own set of assumptions. The step-by-step approach and building block approaches assume that disarmament will arrive eventually, provided steps continue to be taken or blocks continue to be added. However, they offer little in the way of explanation for why steps have slowed or what should be done about it, which more recent approaches have sought to address. The 'prohibition, stigmatisation, elimination' approach identifies the lack of progress today with a lack of political will, which needs therefore to be addressed with political and diplomatic pressure; the CEND approach, by contrast, primarily identifies threats and competition at the geostrategic level as the cause. There is truth in both analyses, opportunities opened by each, and risks to relying on any of them too heavily.

An 'integrative' approach to nuclear disarmament is now needed. The idea that the international community will subscribe to a single nuclear disarmament approach again in the coming years is a fiction, and tribalism and politicking in favour of one approach or another at the expense of nuclear disarmament itself will cause more harm than good. In principle, these approaches can be complementary if they are allowed to be, and addressing a complex issue with diverse approaches is a tried and tested mechanism for problem solving, while overdependence on any one approach can lead to tunnel vision and stifle creativity. Empathically and respectfully recognising that the policy community holds different assumptions and values will create the goodwill and generosity needed to make any one of these approaches succeed. In the interests of nuclear disarmament advocates of all stripes to avoid throwing the baby out with the bathwater, and to maximise the benefits while minimising the harm of each approach, it is important to recognise that these are all building blocks in the end.

The following sections look at successes and failures over the past 25 years or so. Since the step-by-step paradigm has been dominant over this period, most of these have been framed (whether in advance or retrospect) as steps, though conceptually they might just as easily be considered 'building blocks.' Returning to the original definition of nuclear disarmament offered herein – as 'the process leading to the realization of the ultimate goal of a world without nuclear weapons and any measure contributing hereto' – this report takes an inclusive perspective of success and failure. It includes both achievements that were pursued with nuclear disarmament as an end goal and also cautiously includes advances or setbacks that had ulterior motivations but which nevertheless affect the context for disarmament positively or negatively. Appended to some failures are recommendations, to make clear that there are more things that can be done.



# Key successes in nuclear disarmament since 1995

## **Nuclear testing has been (largely) abandoned**

Nuclear test explosions were an accepted feature of the Cold War, with over two thousand taking place since 1945.<sup>16</sup> Yet with the exception of a few tests by India and Pakistan in 1998, and more recently by North Korea, states have otherwise observed voluntary moratoria against testing since the early 1990s. There is now a reasonably strong norm in the international community that nuclear tests are unacceptable. Every year that goes by strengthens the norm a little more.

Can a non-legal norm be considered a success in its own right? Experts naturally disagree. Testing is an expensive endeavour, and the need to test decreased with supercomputers that could model tests more accurately, so the domestic drivers for the moratoria should not be overlooked and the strength of the international norm not overstated. Moreover, the Comprehensive Test Ban Treaty (CTBT), a multilateral instrument that would legally prohibit testing, is not yet in force, despite being viewed as relatively low-hanging fruit that has been held up primarily by political barriers, the desire in the US to maintain future flexibility, and inertia. After positive negotiations under the Clinton Administration, the CTBT failed at the last hurdle in the US Senate in 1999. Today, the accepted wisdom is that most of the nine Annex 2 states, whose signature and ratification are required for the Treaty to enter into force, will follow the United States' lead should they take it.

Until the United States is ready, which will almost certainly be after President Trump leaves office, the CTBTO Preparatory Commission has been diligently collecting signatures and ratifications from NNWS.<sup>17</sup> The International Monitoring System (IMS) designed to detect nuclear explosions anywhere in the world is almost at full operational capacity, and in recent years has demonstrated its ability to detect North Korean underground nuclear tests, as well as providing an early warning system against natural phenomena like earthquakes. And the CTBTO has also found secondary roles for itself in next generation outreach and education, bridging the science-policy divide through the CTBTO Youth Group.

## **Non-proliferation is increasingly embedded within the international community**

A strict and effective global regime that prevents other states from obtaining nuclear weapons will ultimately be a necessary condition of disarmament and gives states in possession of nuclear weapons confidence that they can move forward. However, it also locks in the hard power advantages enjoyed by the NWS, which had led to allegations by some NNWS that NWS have put excessive focus on non-proliferation while ignoring the disarmament pillar.

Over the last decade or so, there is a perception that the non-proliferation norm has become more embedded. UN Security Council Resolution 1540 (2004) prohibited states from assisting non-state actors in developing or acquiring nuclear, chemical and biological weapons and delivery vehicles, and mandated that states adopt and enforce appropriate effective laws within their national procedures to this end.<sup>18</sup> Export control regimes, which prevent the export of proliferation-sensitive or dual-use materials and technologies, continue to strengthen. As of December 2018, 134 states have concluded Additional Protocols (APs) – which provide additional tools for verification to existing safeguards agreements – with the International Atomic Energy Agency (IAEA), 48 of which are in the last decade.<sup>19</sup> The swelling of numbers and growing acceptance that states with mature nuclear technologies are expected to have robust safeguard regimes is a major shift since the end of the Cold War, and states that have tended to hold against it appear to softening their stances.

The verification provisions included in the Joint Comprehensive Plan of Action (JCPoA), more commonly known as the Iran Nuclear Deal, are the strongest ever applied, and while the document expressly states that its provisions and measures ‘should not be considered as setting precedents for any other state or for fundamental principles of international law,’ in practice the international support is has garnered is seen by some to have further strengthened the norm.<sup>20</sup> The Low Enriched Uranium Bank Storage Facility at the Ulba Metallurgical Plant in Öskemen, Kazakhstan opened in 2017 offers states with stringent IAEA safeguards a reliable supply of nuclear reactor fuel, reducing the incentives to develop full fuel-cycle capabilities and their attendant proliferation risks, although it will not prevent a determined state.<sup>21</sup> The notional end goal is a world in which the likelihood of getting caught with a clandestine nuclear weapon programme by the international community is so high that none try.

## **There are two new regional Nuclear Weapon-Free Zones since 1995**

Between 1967 and 2006, five nuclear weapon-free zones (NWFZs) have been established covering states in Latin America and the Caribbean, Africa, the South Pacific, Southeast Asia and Central Asia, the latter two added since 1995. Added to these are Cold War treaties covering the Antarctic, the Moon, outer space and the seabed.<sup>22</sup>

The systematic, negotiated exclusion of nuclear weapons from regions has tended to be overlooked or taken for granted because the states involved have never had – or no longer have – nuclear weapons. This misses the point. NWFZs are notable, both as pre-emptive and reactive measures, with tangible and long-term benefits to regional and international security. They were not easy to negotiate either. In Central Asia, where a NWFZ was agreed in 2006 covering a huge zone of the northern hemisphere, differences were not

insignificant and entailed major changes to domestic policies – such as Kazakhstan no longer being able to import radioactive waste – that have not always been fully appreciated abroad.

A pity, then, that the NWS have overlooked the opportunity to sign the protocols to many of these treaties which would see them provide legally-binding negative security assurances not to attack the state parties with nuclear weapons or contribute to violations. In the case of the Bangkok Treaty (1995) covering Southeast Asia, none of the five have signed, and it is particularly hard to see a reason why the United Kingdom or France should hold out.

## **Transparency around nuclear forces is (slowly) becoming more institutionalised**

Opacity around nuclear forces was the norm during the Cold War. The secrecy may have added to the survivability of nuclear forces in game theoretical logics, but the effect was often paranoia and misjudgement that drove speculative arms races and saw the world more than once get close to nuclear war. For instance, the NATO exercise Able Archer 83, a highly-realistic simulation of nuclear war that some Soviet officials interpreted to be a prelude to war, almost prompted a Soviet pre-emptive strike against the West, and heightened the risk of release just weeks later when there was a false alert in a Soviet early warning station. The full scale of these near-misses became clearer after the Cold War.<sup>23</sup>

The principle of transparency (releasing previously confidential information about the size and other details of the production and use of nuclear technologies and materials) underpins nuclear disarmament verification and alleviates mistrust by setting intentions more clearly. There is still some way to go, and states are understandably hesitant about being on the dancefloor alone, but the trend remains positive and is gaining in norm status particularly in France, the United Kingdom and the United States. Credit is partly due to the Non-Proliferation and Disarmament Initiative (NPDI), a coalition of 12 states formed to promote accountability around the 64-Point Action Plan (2010), which has made transparency a core issue of their agenda for nearly a decade. States, experts and civil society should now prioritise agreement on the specificities of a standard reporting form to track progress on disarmament, and gently encourage these states to release further information.

## **Nuclear disarmament verification is advancing**

*'Trust, but verify.'*

*–Russian proverb, quoted by US President Ronald Reagan in 1987.*

The ability to verify that nuclear weapons and sites have been irreversibly dismantled remains a core assurance requirement of a robust disarmament regime, but is a technically-challenging prospect. States must learn to determine whether a weapon or site is dismantled, while at the same time having many details about it withheld on national security or non-proliferation grounds. This proves particularly challenging to NNWS that do not have nuclear weapons or sites of their own to compare against.

Nevertheless, the art of nuclear disarmament verification (NDV) is making steady progress. The IAEA was able to verify the dismantlement of South Africa's small nuclear programme in the mid-1990s. The UK-Norway Initiative founded in 2007 was the first collaboration between a NWS and a NNWS, and paved the way for the Quad Nuclear Verification Partnership (QNVP), a multi-year arms control simulation initiative undertaken by Sweden, the US, the UK and Norway, and later the International Partnership for Nuclear Disarmament Verification (IPNDV), involving more than 25 countries. A Group of Government Experts consisting 25 countries is sitting in Geneva through 2018 and 2019 to make further recommendations.<sup>24</sup> NDV is not yet fully developed and will never be foolproof, as disarmament will always entail an assessment of risk and the possibility of cheating, but if states feel confident in their ability to comprehensively verify disarmament, then it increases the chance of agreement being reached.

## Humanitarian impacts of nuclear weapons are back on the agenda

The 2010 NPT Rev Con outcome document explicitly noted 'the catastrophic humanitarian consequences that would result from the use of nuclear weapons.'<sup>25</sup> This precipitated a global movement among states and activists that resulted in three conferences on the Humanitarian Impact of Nuclear Weapons (HINW) in 2013 and 2014, which sought to better understand and ultimately remind the world of the horrific humanitarian consequences of nuclear weapons use and reframe the possession of nuclear weapons from a security issue to a humanitarian one. The first two conferences in particular were widely attended including by some NWS.

Today, the HINW conferences are remembered with frustration by some within NWS and their allies, primarily because they provided a springboard for the 'prohibition, stigmatisation, elimination' approach to take shape. But love it or hate it, elaborating and reminding the international nuclear weapons policy community of the humanitarian impacts of nuclear weapons fosters more holistic and evidence-based policymaking and helps eliminate opportunities for euphemistic strategic jargon. On balance, frequently revisiting the humanitarian impacts discourse and, if necessary for some states, finding ways to rehabilitate it within the NWS will benefit nuclear disarmament over the long-term.

## Was the indefinite extension of the NPT a good idea?

The 1995 NPT Review and Extension Conference agreed to extend the treaty indefinitely. This does not and should not mean indefinite possession of nuclear weapons. But it is difficult to disentangle the two politically, and some have suggested that the extension accidentally created the impression that the five NWS recognized under the NPT are permitted to hold onto nuclear weapons indefinitely. Certainly, many believe that appears to show in their behaviour.

Experts interviewed for this report differed strongly on whether the indefinite extension of the NPT in 1995 was a positive or a negative step taken by the international community. Supporters insist that it baked the three pillars – cessation of the arms race and disarmament, non-proliferation, and peaceful uses – into the global nuclear order. Opponents regret that the extension locked in the treaty's inherent discrimination and that the NNWS paid 'up front' with the little leverage they had to ensure that the NWS were keeping up their side of the bargain on disarmament. They identify the extension with a complacency among the NWS that is a root cause of the slowdown of the disarmament agenda. Although many NNWS have since sought to reacquire some of that leverage through the TPNW, some experts believe they should have retained the right to threaten not to extend the treaty again in the first place. The original NPT had been agreed with a 25-year life; the principal alternative proposal was to extend it for another 25 years. If this had been done we would have now been facing a Review and Extension Conference next year in 2020.

Both perspectives have merit. The extension created stability and permitted complacency, but in the long-term complacency and inaction breeds instability, as is being seen in the polarisation of the agenda today. Perhaps the best that can be said is that the extension has embedded the disarmament norm in principle – if not fully in practice. But the consensus decision to extend should be seen within its historical context. The world looked different in 1995 and it is easy to see why extension would have been an inviting prospect at the time. The uncertainty of the Cold War was still fresh, and five of the eleven countries then in possession of nuclear weapons – Belarus, China, France, Kazakhstan, and Ukraine – only joined the NPT between 1992 and 1994. It is easy to see why states would have wanted to lock in gains. Today, with strategic uncertainties again on the horizon, the certainty that the NPT will continue to be in force beyond 2020 provides a foundation of stability that, in this author's view, should not be taken for granted.

# Key failures in nuclear disarmament

## Nuclear disarmament has been deprioritised and stigmatised

Nuclear disarmament receives less attention in the public gaze and the policies of NWS than other nuclear weapons policy issues, such as deterrence and counterproliferation, which entail more immediate security concerns and evolve more quickly, particularly in a world of increasing threat perception. Some claim the opposite is true in some nuclear diplomatic arenas (such as the NPT). Nuclear disarmament advocates also sometimes report feeling patronised or side-lined by the 'realists' for their belief that multilateral disarmament is achievable, even if most members of the international nuclear weapons policy community subscribe to the goal in principle. This has created a largely-unspoken stigma that can distort the approaches of new professionals towards accepting the deterrence paradigm, for fear of being labelled idealistic and having their analytical skills doubted if they were to seriously consider alternatives.

**Recommendation:** In 2007, four Cold War veteran policymakers – George Shultz, Bill Perry, Henry Kissinger and Sam Nunn, sometimes collectively known as the 'Four Horsemen' – called for a world free of nuclear weapons in a high-profile *Wall Street Journal* article.<sup>26</sup> Senior and former officials should walk in their footsteps, by unequivocally reaffirming that disarmament is a desirable and achievable goal.

## The failure of civility

Civility has been a casualty of the last few years of disarmament diplomacy. Disagreement over the approach to disarmament and venting over legitimate frustrations has created bad blood and alienation at the extreme ends of the spectrum. NNWS report feeling unheard or held in contempt by NWS and some allies for their calls to accelerate disarmament. NWS report that their voluntary commitments and previous achievements go unacknowledged and that others refuse to empathise with their threat perceptions. At the human level, these feelings are more damaging to cooperation and compromise than might be realised.

**Recommendation:** Restoring civility has a quick and easy fix, provided all states and experts acknowledge their responsibilities<sup>27</sup> towards the atmospherics of the disarmament regime. This requires a commitment to active listening to all parties, and states to carefully consider their rhetoric such that it is invitation to connect even if expressing disagreement.

## States are backtracking on past commitments under the NPT

The pattern of the NWS making political commitments at NPT Review Conferences, before later declaring them no longer valid (usually on the basis of changes in the international security environment), is a threat to the integrity of the regime and adds credibility to accusations of bad faith by the NNWS. The 13 Steps (2000) and the 64-Point Action Plan (2010), were intended to offer a roadmap for the disarmament pillar, but NWS have since sent clear signals that they consider them to be no longer valid.

The recent worrying trends in nuclear postures that increase the salience of nuclear weapons, invest in new systems or loosen restraints in declaratory policy are of particular concern. Those reneging on agreements or backtracking have a responsibility to the regime to voluntarily explain their policy choices and look for alternative means to better balance their national and international responsibilities.

**Recommendation:** The NWS could release a joint-statement agreeing to honour existing commitments agreed at previous Rev Cons. They could also issue a point-by-point breakdown of the 64-Point Action Plan outlining their approach to realising the aims laid out within the plan.

**Recommendation:** Without alleviating the pressure for progress, all state parties might consider whether ambitious Rev Con action plans that are unlikely to be fulfilled do more harm than good, and should seek clarity (with strong assurances) on whether agreed steps are binding on state parties. With the current polarisation of the NPT, some experts have advocated abandoning the attachment to a consensus outcome in 2020, so as to manage disappointment if it cannot be achieved. This lowering of ambition may prove self-fulfilling, but it may help states identify common ground.

## The international community did not stop North Korea from going nuclear

North Korea's nuclear weapons programme and its decision to abrogate the NPT has affected confidence in the NPT and complicated the disarmament agenda. Many attempts were made to incentivise North Korean disarmament, but each failed. The 1994 Agreed Framework, under which the DPRK would close its Yongbyon nuclear reactor in exchange for a more proliferation-resistant light water reactor, and oil and aid from the United States, was thwarted by a Republican Congress. North Korean perceptions of bad faith on the part of the United States haunt the international community to this day; US officials would later testify to Congress that there was "no fundamental violation of any aspect of the Framework Agreement" by the North Koreans.<sup>28</sup> Although the Clinton Administration may have come close to salvaging the deal in the late 1990s, the Bush Administration's harder line effectively closed that opportunity, and the several rounds of multilateral Six Party Talks that followed were ineffective.<sup>29</sup> Despite the Trump Administration's renewed efforts, many experts believe it is too late to hope for North Korean denuclearisation – the difference between a state with a fledging nuclear programme and a credible nuclear deterrent is too significant.

**Recommendation:** Continued good faith engagement offering sanctions relief and the normalisation of relations by the United States in exchange for denuclearisation steps is the only serious option on the Korean peninsula; there are no credible military options on the table. Great emphasis needs to be put on creating the environment for North Korean disarmament, and not simply restating existing demands.

## Arms control is breaking down

Arms control is a tool for the management of stability rather than disarmament, but the two regimes are intimately linked. It has historically focused on placing mutual limitations on stockpile numbers or banning classes of weapons by the United States and Russia. However, the arms control architecture built up over the Cold War is being torn down. The Bush Administration's decision in 2002 to withdraw from the Anti-Ballistic Missile (ABM) Treaty, which contributed to strategic stability by limiting the placement of ballistic missile defences, was a major blow to trust with Russia that sowed the seeds for recent strategic nuclear deployments. Russia has since halted participation in the Treaty on Conventional Armed Forces in Europe in 2015 and the Plutonium Management and Disposition Agreement.<sup>30</sup> Meanwhile, the United States has recently announced its withdrawal from the Intermediate-Range Nuclear Forces Treaty (INF). Both sides have accused the other of violating the Open Skies Treaty.<sup>31</sup> The only arms control on nuclear forces now remaining is New START, which will expire in 2021. It can be extended for five years upon mutual agreement, but dialogue has not yet started as there is some suggestion that strategists in the White House doubt its value, leaving open the real risk that for the first time in a half century the United States and Russia will have no bilateral constraints on their nuclear forces. These developments pose searching questions about how to manage stability in the twenty-first century.

**Recommendation:** The international nuclear weapons policy community needs to consider the next generation of arms control measures and what end it is designed to achieve. It is likely that the bilateral US-Russia model is becoming less effective as other nuclear-armed states develop advanced technologies,

so future arms control may need to be multilateral and include defensive strategic systems like ballistic missile defence too. It may rely in the first instance on non-binding measures like codes of conduct. Moreover, states will need to sustain confidence in existing linked regimes like the CWC and BWC, and develop effective norms or regulations on emerging weapons technologies such as cyber, space, lethal autonomous weapons systems, nanotechnologies, robotics, and advanced conventional capabilities. The task is to avoid tunnel vision and siloing while recognising a comprehensive agreement across regimes is likely to be impossible.

### **There is a new arms race**

The world has resumed a qualitative nuclear arms race. All nuclear-armed states are in a process of modernising or adding new capabilities to their nuclear arsenals. The US Nuclear Posture Review in 2018 outlined new capabilities for limited nuclear strike, while President Putin in his 2018 Address to the Federal Assembly announced a new nuclear-armed unmanned underwater vehicle and hypersonic cruise missile.<sup>32</sup> Beyond the nuclear realm, huge budgets are being poured into emerging technologies, which remain largely unregulated despite calls for preventive arms control. The rapid development of these technologies, their numerous interlinkages and high-classification levels makes it difficult to keep track let alone to regulate, but the effect is to undermine established security postures and to increase paranoia and instability. Unlike in the Cold War when military technology represented the cutting edge, today many technologies are being developed in the private sector, with the effect also of making such technologies easier to obtain.

**Recommendation:** Curtailing the development of technologies is nearly impossible to enforce, but efforts can be made by multi-stakeholder groups that involves the private sector to restrain their proliferation and lay down norms and responsibilities. All states should exercise restraint adding new military capabilities and demonstrate sensibility to the security dilemmas that they can cause.

### **Four nuclear-armed states remain outside the Non-Proliferation Treaty**

India, Israel, North Korea, and Pakistan are each nuclear-armed but remain outside the NPT. As such they are not bound by its three pillars, and at least three of them have growing and unchecked arsenals. Progress on disarmament among the five NPT NWS cannot be entirely divorced from progress by these states; China, India and Pakistan's strategic relationship cannot be untangled, while the United States will not consider disarmament before North Korea is denuclearised. This situation has not been helped by the fact that the United States and India entered into a civil nuclear agreement in 2005, a privilege usually only reserved to states within the NPT and leading to accusations of double standards. On the other hand, the US-India deal could show how the non-NPT states could be drawn into the broader non-proliferation regime.

**Recommendation:** Convincing these states to join the NPT is likely to be unsuccessful, but there may be other means to draw them into responsible behaviour without undermining the integrity of the Treaty and the regime. In parallel, the international nuclear weapons community should instead foster a pluralistic dialogue on the responsibilities of all states around nuclear weapons, involving participants from these states regardless of their participation in distinct treaties.

### **The Conference on Disarmament remains in deadlock after almost a quarter century**

The Conference on Disarmament (CD) is a multilateral disarmament treaty negotiating body based at the United Nations in Geneva which, since the negotiation of the CTBT in 1996, has remained deadlocked and unable to agree a programme of work. In principle it is the forum most suited to make significant multilateral disarmament steps, including (at the working level at least) the NPT.

The reason for the deadlock may sound like satire and is the kind of problem that could only exist in diplomacy: the CD operates on the basis of consensus decision-making and in 23 years the state parties have been unable to come to agreement on what to do next, with resistance to any proposals for negotiating

on any one mechanism without side agreements on others, but no possible grand agreement available. The result has been a blockage in the pipeline. The agreement to set up five working groups in 2018 to look at longstanding issues allowed for some minor progress, but even that modest agenda was a bruising experience, with one working group on negative security assurances being blocked by a procedural dispute between the US and India.

**Recommendation:** Reopening meaningful negotiations in the CD would be hugely symbolic and would positively ripple through the disarmament regime, but it requires sufficient willpower and leverage from the NWS. The NWS operating through the P5 Process could prioritise the unlocking of the CD on their agenda.

## The international community has not achieved a Fissile Material Treaty

A Fissile Material Cut-off Treaty (FMCT) is a non-discriminatory, multilateral, internationally verifiable treaty banning the production of fissile material for nuclear weapons or other nuclear explosive devices. An FMCT has been a longstanding goal of the international community, but hopes that it could be negotiated in the mid- to late-1990s in the CD were dashed by the deadlock, explicitly from Pakistan fearing strategic regional dominance from India, but with suspicion that others were hiding behind Pakistan.

Strident advances have been made in recent years under concerted leadership by the Canadian Government, which has informally 'adopted' the fissile material cut-off issue over the last quarter century, since Ambassador Gerald Shannon was appointed CD Special Coordinator in 1994. The United Nations Group of Governmental Experts on the FMCT (2013-2015) chaired by Canadian Ambassador Elissa Goldberg recommended steps that might contribute to successful negotiations, while the high-level FMCT Expert Preparatory Group (2016-2018) that followed, chaired by Canadian Ambassador Heidi Hulan, has comprehensively mapped out all the possible political and technical questions remaining.<sup>33</sup> The principal obstacle standing in the way of an FMCT is now achieving political agreement.

**Recommendation:** States should seriously consider the range of options made available in the Expert Preparatory Group's report, and undertake dialogue in good faith – both inside and outside the CD – to finally achieve a Fissile Material Treaty.

**Recommendation:** States with robust financial and technical capabilities could consider informally 'adopting' other disarmament issues for long periods of time, as the Canadians have done with the FMCT, in order to keep hope in the steps alive. This requires a commitment from the foreign ministry to invest in an issue.

## The JCPoA has been undermined

The Joint Comprehensive Plan of Action (JCPoA), or Iran Deal, was concluded in 2015 after twelve years of multilateral diplomacy, much of it in the backchannels. It effectively prevents Iran from having the means to produce a nuclear weapon whilst the deal is in play, stringently monitored and verified by the IAEA, and sought to use the time bought by the deal to normalise relations with the international community. However, opposing the idea of long-term normalisation, in May 2018 the Trump Administration announced the US' withdrawal and soon after re-imposed sanctions, in a move that many experts believe was a swipe at the Obama Administration. While the separation of the nuclear issue from other issues of concern, like Iran's ballistic missile programme and human rights record, was a crucial factor in successfully achieving the deal, the United States is now seeking a more comprehensive alternative. The other five parties have remained in the deal and resisted secondary sanctions, but the deal is at risk of unravelling without the promised US sanctions relief.

## A Weapons of Mass Destruction-Free Zone in the Middle East is a long way off

The 1995 Review and Extension Conference promised a conference to pursue a Weapons of Mass Destruction-Free Zone in the Middle East (WMDFZME) as part of the broader political deal behind the agreement to indefinitely extend the NPT. This conference was never delivered, and 15 years later the Rev Con agreed to hold it by the end of 2012. Again, this never materialised. In practice, both the WMDFZME and the NPT's other issues have been harmed by being bound together, to a large extent because Israel – the only state in the Middle East with nuclear weapons – is not party to or bound by the NPT. The 2015 Rev Con draft Final Document was not adopted in the end, after the United States, the United Kingdom and Canada objected to proposals to hold a conference on the WMDFZME regardless of whether all relevant states were to turn up, which may have ultimately prevented a consensus outcome to the conference.<sup>34</sup> This is an issue that many appear to perceive as hopeless.

**Recommendation:** It is time for the international community to consider taking the WMDFZME discussions to another forum, where Israel is an equal partner. As one expert has put it, the NPT and the WMDFZME are like conjoined twins that need to be separated if both are to survive. There is now a week-long WMDFZME conference planned at the United Nations in New York for mid November 2019 under the care of the General Assembly but it is unclear which key states will attend and what the agenda will include.

## The global public has lost interest in nuclear disarmament

Nuclear weapons issues have appeared in the international news cycle again in recent years, prompted by the US pressure campaigns against North Korea and Iran. But this fact should not obscure the structural decline in interest and knowledge of these issues among the general public, including within NWS. Nuclear disarmament consistently trails at the bottom of public political priorities, below immediate domestic concerns or apparently more pressing international issues like social equality, climate change and the global refugee crisis. There is a perception that disarmament was a Cold War issue that is now resolved or being responsibly managed, or that the public cannot impact the issue in any case. And because disarmament moves slowly and in fusty diplomatic fora by necessity, it lacks obvious newsworthiness despite the importance of the issue.

There a vicious circle at play. The majority of people do not know much about nuclear weapons and feel politically disempowered, so in turn do not try to learn anything. Parliamentarians see the issue low in the priorities of their constituents and so rarely get involved, resulting in little high-level engagement on nuclear weapons issues. Where there is engagement it is often as a proxy for other conflicts between states, or posturing that prioritises the need to appear strong over the need for international compromise. This lack of public and parliamentary engagement, alongside the slow pace of progress, means the media is also not incentivised to work on the issue. In parallel, nuclear weapons have ceased to be prevalent in popular culture, with few films depicting their complexities – and when they do, as an anachronism, the centre of a nuclear terror plot, or a card up humanity's sleeve to save the world against alien invasions.<sup>35</sup> As a result, public engagement suffers more.

**Recommendation:** The vicious cycle needs concerted interventions at multiple levels. This report was designed to inform a next generation of journalists on nuclear weapons issues, and hopefully inspire them to make it part of their brief in their careers and better picture their responsibilities in this agenda. There are opportunities for anyone seeking to articulate the complexities and the opportunities to a wider better-informed public. Governments and civil society have a responsibility to engage the general public and parliamentarians, conveying the nuances of the issues faithfully, and look for opportunities to make these issues relevant to people's everyday lives.



The United Nations General Assembly Hall

# Conclusion

*'We go through the present blindfolded... Only later, when the blindfold is removed and we examine the past, do we realise what we've been through and understand what it means.'*

— Milan Kundera, *Author*

What, if anything, can be made of all this? Has the nuclear disarmament regime been successful to date? Is it possible to make a composite judgement on such a contested issue, and if so, upon what principles should it be judged? And when would it be right to make the call?

Nuclear disarmament as an end goal has evidently not been achieved. Although the NWS have been legally obligated to engage in disarmament negotiations in good faith since 1970, nuclear weapons still play a major role in the international security architecture and meaningful multilateral disarmament negotiations still feel like a distant prospect. This has bred understandable feelings of despondency and resentment, which will need to be addressed with some substantive proposals in the 2020 Rev Con and beyond.

Whether or not nuclear disarmament as a holistic process, with its numerous moving parts, has been or remains successful is harder to say and is in the eye of the beholder. The wicked problem of nuclear disarmament cannot be tackled in a silo or within any imposed timeline, and moving carefully and surely may be a necessary feature of a robust regime. As shown in this report, there are successes to celebrate since the end of the Cold War, but many of these (i) reflect the continued implementation of agreements made in the 1990s rather than new disarmament agreements, (ii) are the result of agreements among NNWS that excluded or lacked buy-in from the NWS, such as NWFZs or the TPNW, or (iii) were steps that improve the conditions for nuclear disarmament but were not taken with disarmament in mind. Among

these are numerous failures or missed opportunities, and the rapidly evolving strategic, political and technological context today is a serious cause for concern that further steps are unlikely. The case for nuclear disarmament must continue to be put forwards.

What, then, might failure look like? The regime slowing to a crawl may be enough to qualify, and from some perspectives this is already the case. There is a suspicion in some quarters that this is an ideal outcome for some within the NWS, who are protective of the status quo. But patience ought not be mistaken for failure, and to an extent this can be explained by disagreement between state parties over priorities. Backtracking on past commitments is a clearer indicator, but a little allowance must be made to accommodate an overall trend – the Bush Administration weakened the US' disarmament commitments in the 2002 NPR, but the Obama Administration reinforced them with stronger commitments. Unequivocal failure would be a demonstrable lack of political will across one or more NWS administrations precipitating a wider collapse in interest among the key states. The international community is not there yet, but staving off this eventuality should be the highest priority.

Only history will tell in the end if the approaches being taken today were right – if humanity survives to write it. What is clear today is that no amount of public pressure will cause nuclear disarmament to happen overnight (absent a major war or accident), and that a grand political agreement by all nine nuclear-armed states to disarm simultaneously is implausible. Nuclear disarmament will always involve steps, building blocks or conditions in one form or another, and whether this is called a 'step-by-step' process or something else does not matter hugely, but it does risk distracting from the work at hand. All of the approaches described in this report will contribute to the elimination of nuclear weapons in their own way, and retrospective statements that something else should have been done will always be dependent on counterfactual assumptions.

The task at hand is for the NWS and NNWS to comprehensively and collectively craft a compelling vision that can integrate all of the steps and conditions needed to bring nuclear disarmament to fruition. This will entail linking regimes that have often been imagined as competing and accepting that none is likely to succeed alone. It will also need to involve numerous other stakeholders: international organisations, think tanks, academia, the private sector, civil society, and the media. As for climate change, public engagement and accountability will be crucial to driving action, and education is needed to build public understanding of the complexities of the issue. That will require expertise and interest from a new generation of journalists, and it is hoped that this report might provide some inspiration.

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